

Amendment to the Claims:

In compliance with the Revised Amendment Format, a complete listing of claims is provided herein.

1. (Currently Amended) Apparatus for at least one of freezing and thawing at least one bioproduct, comprising:

a unit for at least one of freezing and thawing at least one bioproduct on a small scale, the unit comprising at least two opposite surfaces for accepting a bioproduct container for the unit when the bioproduct container is present;

wherein at least one of the at least two opposite surfaces is configured to be coupled to at least one driving device for at least one of freezing and thawing, wherein at least one of (a) a spacing of the at least two opposite surfaces and (b) a dimension-width of the bioproduct container for the unit, is sized to simulate a slice depth of a larger bioproduct container for a larger-scale unit taken between freezing surfaces of the larger bioproduct container, ~~wherein the dimension is one of length, width and depth,~~ and wherein information about the at least one bioproduct at the large scale is deducible from actual information obtained for the at least one bioproduct at the small scale.

2. (Original) The apparatus of claim 1, further comprising at least one driving device for at least one of freezing and thawing, wherein the at least one driving device is coupleable to the at least one of the at least two opposite surfaces.

3. (Original) The apparatus of claim 2, wherein the at least one driving device comprises at least one conduit for a heat-transfer fluid.

4. (Original) The apparatus of claim 3, wherein the at least one conduit comprises a winding conduit.

5. (Original) The apparatus of claim 1, further comprising at least two clamping arrays coupled to the unit for holding a plurality of bioproduct containers.
6. (Original) The apparatus of claim 5, wherein the at least two clamping arrays are coupled to the at least two opposite surfaces of the unit.
7. (Canceled)
8. (Original) The apparatus of claim 1, further comprising at least one container situatable within the unit for containing the at least one bioproduct.
9. (Original) The apparatus of claim 1, wherein the unit comprises a plurality of cells for holding the at least one bioproduct.
10. (Original) The apparatus of claim 9, further comprising at least one divider for creating the plurality of cells.
11. (Previously Presented) The apparatus of claim 10, wherein at least one of the at least one divider is removable without dismantling the unit.
12. (Original) The apparatus of claim 1, further comprising a heat-conductive cladding for the unit.
13. (Original) The apparatus of claim 12, wherein the heat-conductive cladding comprises a metal.

14. (Currently Amended) A system for performing at least one of freezing and thawing of at least one bioproduct on a small scale, comprising:

a unit for at least one of freezing and thawing at least one bioproduct on a small scale, the unit comprising at least two opposite surfaces for accepting a bioproduct container for the unit when the bioproduct container is present;

at least one driving device for at least one of freezing and thawing coupleable to at least one of the at least two opposite surfaces, wherein at least one of the at least two opposite surfaces is configured to be coupled to the at least one driving device; and

at least one container for containing at least one bioproduct specimen within the unit;

wherein at least one of (a) a spacing of the at least two opposite surfaces and (b) a dimension-width of the at least one container, is sized to simulate a slice-depth of a larger bioproduct container for a larger-scale unit taken between freezing surfaces of the larger bioproduct container ~~wherein the dimension is one of length, width and depth~~, and wherein information about the at least one bioproduct at the large scale is deducible from actual information obtained for the at least one bioproduct at the small scale.

15. (Original) The system of claim 14, wherein the at least one driving device comprises at least one conduit for a heat-transfer fluid.

16. (Original) The system of claim 15, wherein the at least one conduit comprises a winding conduit.

17. (Original) The system of claim 14, further comprising at least two clamping arrays coupled to the unit for holding a plurality of bioproduct containers.

18. (Original) The system of claim 17, wherein the at least two clamping arrays are coupled to the at least two opposite surfaces of the unit.

19. (Canceled)

20. (Original) The system of claim 14, wherein the at least one container is integral with the unit.

21. (Original) The system of claim 20, wherein the at least one container comprises a plurality of cells for holding the at least one bioproduct.

22. (Original) The system of claim 21, further comprising at least one divider for creating the plurality of cells.

23. (Original) The system of claim 22, wherein at least one of the at least one divider is removable.

24. (Original) The system of claim 14, wherein the at least one container is separate from and situatable within the unit.

25. (Original) The system of claim 14, further comprising a heat-conductive cladding for the unit.

26. (Original) The system of claim 25, wherein the heat-conductive cladding comprises a metal.

27. (Currently Amended) A method of performing at least one of freezing and thawing of at least one bioproduct on a small scale, comprising:

providing a unit for at least one of freezing and thawing at least one bioproduct, the unit comprising at least two opposite surfaces for accepting a bioproduct container for the unit when the bioproduct container is present;

coupling at least one of the at least two opposite surfaces to at least one driving device for at least one of freezing and thawing; and

performing at least one of freezing and thawing on the at least one bioproduct, wherein the bioproduct is situated within the unit;

wherein at least one of (a) a spacing of the at least two opposite surfaces and (b) a dimension of the bioproduct container for the unit, is sized to simulate a slice of a larger bioproduct container for a larger-scale unit taken between freezing surfaces of the larger bioproduct container, wherein the dimension is one of length, width and depth, and wherein depth; and

deducing information about the at least one bioproduct at the large scale is ~~deducible from~~ actual information obtained for the at least one bioproduct at the small scale.

28. (Original) The method of claim 27, further comprising situating the at least one bioproduct within the unit.

29. (Original) The method of claim 28, wherein the bioproduct is situated within a container, and wherein the situating comprises situating the container within the unit.

30. (Original) The method of claim 27, wherein the unit comprises a plurality of cells for accepting the at least one bioproduct, the method further comprising situating the at least one bioproduct within at least one of the plurality of cells.

31. (Original) The method of claim 27, wherein the performing comprises controlling a rate of heat exchange between the at least one driving device and the at least one bioproduct.

32. (Previously Presented) The method of claim 27, further comprising coupling at least one heat-conductive cladding to the unit.

33. (Canceled)

34. (Previously Presented) The apparatus of claim 1, wherein the bioproduct container for the unit comprises a first bag, and wherein the bioproduct container for the larger-scale unit comprises a second bag larger than the first bag.

35. (Canceled)

36. (Previously Presented) The system of claim 14, wherein the bioproduct container for the unit comprises a first bag, and wherein the bioproduct container for the larger-scale unit comprises a second bag larger than the first bag.

37. (Canceled)

38. (Previously Presented) The method of claim 27, wherein the bioproduct container for the unit comprises a first bag, and wherein the bioproduct container for the larger-scale unit comprises a second bag larger than the first bag.

39. (New) A method of making apparatus for at least one of freezing and thawing at least one bioproduct on a small scale, the method comprising:

providing a unit for at least one of freezing and thawing at least one bioproduct on a small scale, the unit comprising at least two opposite surfaces for accepting a bioproduct container for the unit when the bioproduct container is present; and

spacing the at least two opposite surfaces to proportionally correspond to a slice of a larger bioproduct container for a larger-scale unit taken between freezing surfaces of the larger bioproduct container.

40. (New) The method of claim 39, further comprising coupling at least one driving device for at least one of freezing and thawing to the at least one of the at least two opposite surfaces.

41. (New) The method of claim 39, further comprising coupling at least two clamping arrays to the unit for holding a plurality of bioproduct containers.

42. (New) The method of claim 41, wherein the coupling comprises coupling the at least two clamping arrays to the at least two opposite surfaces.

43. (New) The method of claim 39, further comprising coupling a heat-conductive cladding to the unit.

44. (New) A method of making a system for at least one of freezing and thawing at least one bioproduct on a small scale, the method comprising:

providing a unit for at least one of freezing and thawing at least one bioproduct on a small scale, the unit comprising at least two opposite surfaces for accepting a bioproduct container for the unit when the bioproduct container is present;

providing at least one container for containing at least one bioproduct specimen within the unit; and

sizing a dimension of the at least one container to proportionally correspond to a slice of a larger bioproduct container for a larger-scale unit taken between freezing surfaces of the larger bioproduct container.

45. (New) The method of claim 44, further comprising coupling at least one driving device for at least one of freezing and thawing to the at least one of the at least two opposite surfaces.

46. (New) The method of claim 44, further comprising coupling at least two clamping arrays to the unit for holding a plurality of bioproduct containers.

47. (New) The method of claim 46, wherein the coupling comprises coupling the at least two clamping arrays to the at least two opposite surfaces.

48. (New) The method of claim 44, further comprising coupling a heat-conductive cladding to the unit.

49. (New) The method of claim 44, wherein providing the at least one container comprises providing at least one container integral with the unit.



50. (New) The method of claim 49, wherein providing the at least one container integral with the unit comprises providing at least one container with a plurality of cells for holding the at least one bioproduct.

51. (New) The method of claim 50, further comprising providing at least one divider for creating the plurality of cells.

52. (New) The method of claim 51, wherein providing the at least one divider comprises providing at least one removable divider.